

# The Correlates of Developing Green Supply Chain Management Practices: Firms Level Analysis in Malaysia

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**Abstract** -Over all businesses are ever changing competition environment, organization are always required to make modification internally and externally to compete globally successfully into marketplace. Supply chain management is key sources for firms to gaining superior performance. The basic purpose of this paper is to examine the level of association between the two indicators management support and their organization learning with the concept of green supply chain management environment. Supply chain is globally increasingly important concerns for all business and challenge for them are logistics management. Total quality management (TQM) and environmental management come from firm's experiences and procedure of organizational learnings. This study computed positive significant relationship with organizational learning mechanism; support of organization and GSCM practices adopted controlled variables from organizations size, regulations of country perspective, cost pressure by organization, practices of industry at different levels. Over all findings and implications of logistics management are discussed.

**Keywords:** Green Supply Chain Management, TQM, Management Support, Organizational Learning

## 1. Introduction:

With the passage of time, various industries are shifting their competitive focus among the networks of other companies. For improving cost and service performance, various companies have enhanced their scope in terms of logistic operations to supply chain management (SCM). The authors like Guide Jr, V. D. R., and Van Wassenhove [20], explained two views regarding the logistic activities. The first one is known as inbound logistic or material management and 2<sup>nd</sup> is physical distribution or outbound logistics. The first one is

linked with the movement of products from outside to inside the firm. For instance, storage and processing of the input for their reshaping into output. Significant integration and coordination is very much important among various parties involved in it, for effective management of both inbound and output logistics [8]. This ultimate integration among the parties will result in most cost-effective way.

From the perspective of supply chain, logistic is concerned with the management of both upstream and downstream relationship. Major parties in both upstream and downstream are the suppliers and customers [51]. Such elements have made supply chain an important process with competitive and logistic strategy specifically for the multinational corporations or MNCs. It is purely the management of overall series of activities which are starting from the acquiring of raw material components from its suppliers and delivery of ultimate product/service to its customers. For this purpose, MNCs have established a global network with various suppliers to get the competitive advantage from country and industry specific dimensions.

In last decade, the economy of Malaysia grew with an attractive growth rate of 6.2 % in 2017 compared to 4.1% in 2016. Besides the level of global trade also increased with the Malaysia dramatically with the membership of Malaysia in World Trade Organization (WTO). With the increasing level of globalization, it is obvious for the Malaysia and other Asian countries to consider seriously the environmental implication of their supply chain and logistic practices. Additionally, sharing their best concern with international partners is also a key discussion [35]. Through these competitive, environmental and economic

pressures with outcomes, Malaysia has grown in logistical and supply chain practices [39].

Additionally, the concept of GSM represents within and outside the organizational role for the management of environment. The concept of GSCM covers the both dimensions of inbound and outbound logistic with the major consideration to incorporate environmental issues at each stage. Such consideration can help to protect the environment through to post consumer disposal with the closing the loops of reverse logistic as well [16]. Government and pressure from the public have increased their influence over various Malaysian enterprises to focus on GSCM and to work for the implementation of environmental practices [17][71][72].

This study emphasizing on the major three concerns of the extent to GSCM for implementation effect by Malaysian's firms, which are as, (A) External Relationship (ER) of green customer cooperation and green purchasing by environmental activities. (B) Recovery of investment (IR) in the context of logistics domain from an end of life 'closing-the-loop' and the last third is (C) inside scoop interaction with the involvement of eco-design practices for delivery of cooperative design. Conducted previous researches on the developing Malaysian firms, revealed the practices of GSCM have quite strong potential to effect the environmental and process relationship towards the supply chain, and these practices of GSCM have strong significant impacts on financial performance, enterprises environmental and operational [52][73].

Expanding this research domain, further argued that adopted practices of GSCM is positively related to two characteristics of organizational management: support of management and also learning of organization, these organizational characteristics and controlling environment of organization are the supplier and cost pressure, relevant practices based on the industry line, size of organization and market. The adopted practice of GSCM also explores the implication of GSCM practices on logistics managements towards the supply chain management. In the start GSCM relevant definition and of practices are define, after demonstrable hypothesis developed from the literature support, further we present our methods, data and analysis techniques, in the last we come up with the detailed discussion of the finding of this study.

## **2. Theoretical Background**

### **2.1 Green Supply Chain Management Practices**

Green Supply Chain Management Practices (GSCM) has defined in different context and definition may vary one author to another but in simple context of GSCM is the relationship of buyer and vendor of green products. GSCM is designed overall to crucial consideration into decision making for all stages of materials and logistics management disposal of post-consumer [10]. On the other side of definition with extensive concepts of 'closed-loop' the implementation of supply chains is a long run logistics cycle of products and material, further use, reuse and management of product and material from inside and outside organizational perspective.

#### **2.1.1 Green Supply Chain Management Practices and its components**

In the context of emerging Malaysian firms, this study has major focuses on its three GSCM factors for emphasizing the adopted practices for all engage firms. These three are the factors (A) External Relationship (ER) factors of GSCM, these factors provide outbound/inbound linkages for environmental management. (B) In Eco-design (ECO), process design and products externally and internally linked with Eco-designs factors, (C) IR factors focus on 'closing the loop' which provides recycling of materials, reuse of material and reverse logistics [6].

The above three factors are true representation of SCM and organizational logistics functions [44]. Similarly, the other factors are most related to the cooperative operations of supply chain management which acquire the components of products and materials [9], while the importance of other components such post operational reflected into IR practices [55]. Further, explanations of major logistics practice in GSCM context for valuable growing importance in Malaysian firms enterprises.

#### **2.1.2. External Green Supply Chain Management Practices relationship factors**

Upstream and downstream indicators can be including in GSCM practices for external organizational operational boundaries. Inbound logistics activities are including in upstream factors such as green purchasing and vendor management [43]. For example, there are such items of environmental requirements to purchased items that providing suppliers with design specification, environmental objectives and environment audits for supplier's internal suppliers and management certification ISO 14001 [7].

Green outbound logistics with such activities, distribution and components of marketing product or organizations supply chain are the downstream factors [32]. Researchers founds from studies

collaboration around environmental issues with supply chain customer supplier are the significant environmental practice adoption and performance in the US and also in Southeast Asia [51].

Customer and downstream foreign enterprises facing environmental pressures in Malaysia, for leading Malaysian enterprises to self-regulate [56]. Explained with example, direct suppliers and their suppliers are not only evaluating in developed countries by leading firms. Young Malaysian consumers increasing awareness of environment and prefer green products [41].

### **2.1.3 Eco-design approaches**

Previous work of Eco-designs was clearly considered the technical improvements to reduce the environmental cost by their products and processes. The improvements become possible when factors of designs externally control of producers, relationship of suppliers and customers, government authorities and recyclers, include important GSCM practice [53].

Eco-designs success demands cooperation's of cross functional between intra-organizational units for both outside partners and inside company throughout the supply Malaysia management. Previous studies of US overall support the product and GSCM [37]. Studies like Hanim Mohamad Zailani, Eltayeb, Hsu, and Choon Tan [22] further support eco-designs link with GGSCM practice into the Malaysian Environmental Protection Agency programs which give the green supply chains as core aspect of their designs for specially in their environment programs.

#### **2.1.2.3. Theory of Investment Recovery or IR**

Investment recovery (IR) is used as an important aspect of organizational strategic use of redeployment, reselling, and recycling and other use full similar techniques to extract greater value from materials and products by organization. IR is also very unique technique to generate revenue by selling useless assets, for reducing storage, space and deploying idle assets from other corporate locations to avoid extra purchasing additional requirement of equipment for materials and processes [1]. Investment recovery also provides the facilities of non-working assets [10].

Investment recovery (IR) is both environmental and economically beneficial practices for organization and society. [15] stated in his study that 70% at least every sales of dollar generate by investment recovery become surplus and it is possible if industries are as diverse as well. Use full practice of IR are as the reverse logistics practices such as recycling, reuse, remanufacturing and other like reclamation [40]. In Malaysia, investment

recovery (IR) not specific much attention such as in other developed countries like US and Germany, reasons are less waste management policies in Malaysia and same lack of closed-loop systems infrastructure [54]. The government of Malaysia changed their focus from resources of subsidies into some important resources such as coal and natural gas, for the sake of renewal of new seek of interest in IR practices. In this study, there are three main GSCM practices that main focus of this entire study that shows emphasized importance in Malaysian perspective, the next discussion is about determinants of major practices by Malaysian firms.

### **2.1.3 Organizational level determinants of Green Supply Chain Management Practices in the context of Malaysia**

In this study, we examined two major organizational determinants of GSCM practices that are investigated by organizational learning from decade, past studies, experience and management support.

#### **2.1.3.1. Learning of the organization as key determinant of Green Supply Chain Management Practices**

The economic system is attributed by market imperfection, in the resources based theory capabilities and components of firm resources are most crucial competencies and competitive advantage in all of firms rivals especially those are very valuable, rare, inimitable [48]. In the environmental areas most beneficial competitive strategies and outcomes depends on firms' development techniques, maintenance of their all resources, effective and efficient implementation, and over time capabilities [11]. Resources based frame work, organizational learning viewed as an especially very important potential when organization keep focusing on continuous improvement, complementary capabilities build from continues improved of organization, such as those are connected with ISO 9000, and Total Quality Management system experience, in the previous study example, GSCM practices apart where in terms of higher-order learning proficiencies involves such as TQEM, EMS, and ISO 14001. Organizational learning system leads to fruit full implementation and efficient outcomes from existing resources and capabilities.

The proper implementation comes from the building of new organizational activities in such a way that develop the coordination and skills [14][73][74], as it seems consider the most important and unique structure, for material, process and product innovation. GSCM practices are very adaptive, derived benefits from environmental learning because of tacit skill

development, by involving employees, team building, and employee coordination of team effort and share inclusive knowledge [43]. These work practices are decentralized in nature, these practices are quite tacit based on skills which are hard to duplicate and very valuable in their area [29], these organizational learning are truly based on past experiences and expertise with their simple structure of system. Organizational process based on socially complex and intangible in nature specifically knowledge oriented [2], such knowledge able process taps organization expertise, different ranges of strategic, well cognitive system arguable cost low.

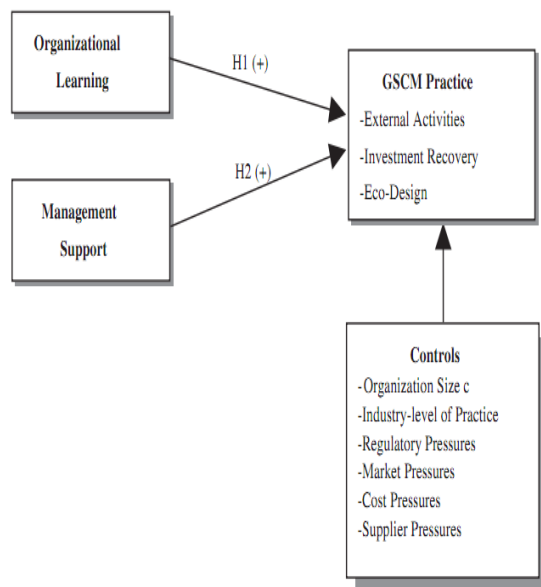


Figure1: Theoretical Model

The studies like Fraj, Matute and Melero [13] discuss that the environmental performance is linked with organization capabilities and more capabilities of organizations possessing can more easily adopt proactive environmental management practice. The study of Haider [21] stated greater management system experiences with existing pollution- prevention of originations can easily adopt EMS at very lower cost. [26] discuss in his studies that the higher experience organization have with management systems like TQM and ISO 9000 are able to handle their systems based on true knowledge successfully adopting Menschiness organizations have well-structured quality management experiences that is gained from environmental management experiences that is directly associated with GSCM practice which promotes environmental management practice. In Malaysia most of the organizations have experiences to establish environmental management from quality management programs such as common example explained ISO 9000 certification [49].

Based on the empirical analysis and theoretical support we hypothesize the organizational learning that provide access for organization to transfer expertise gained from experiences with systems such as TQM, JIST and ISO 9000 generating necessary momentum and facilitating commitment to GSCM practices. This study has its first hypothesis.

H1: practices of GSCM adopted by Malaysian organization will be positively related to the level of organizational learning capabilities.

### Management Support with commitment as determinant of GSCM practices.

In an organization implementation of innovation are critical elements of adoption by management especially in environmental system [34]. Organizational innovation is bit difficult task that makes absent for even for initial stage of very sustained new comers [5]. Decision from top management may take initial step for success by promoting employee involvement, cultural shift, increase in knowledge management, committed employees, increase in employee empowerment [36], [69], [70], in organization employee behavior effects from organizational rewards and incentives systems, by providing efficient trainings, communication secessions and developing teams in an organization. In environmental management previous studies described that there is a proper involvement of senior's management for cross functional programs such as GSCM and TQM. Successful implantation of TQM.

Success is always directly connected with the top management support, their decision are very important to carry a new change, these success are such as business process reengineering, ISO 14000 implementation, enterprise resource planning, and enterprise management system [28]. Literature from previous studies explained the support of top management in executive board, and efforts of organizational commitment are accordingly to GSCM. Support not only from top management but also from midlevel management is important to have successful implementation of environmental practices [30]. For environmental practices support from middle level management is essential for all department in organization and cooperation is very important for successful implementation of environmental practices [33], [46]. For environmental issues and business management strong communication between business managers and environmental professional is necessary to support environmental practices.

Based on literature support there is our second hypothesis of the study:

H2: GSCM practices adopted by Malaysian organizations will be positively related to the level of management support.

### 3. Methods:

#### 3.1. Sample:

To collect the data for some significant findings, Malaysian firms are under observation in three step processes. First this study conducted pilot test to check validated survey instrument design using 28 participants from two different managerial workshops. Responses from mailing were 128, and phone calls follow up was 1000 which are randomly selected by Carlsberg Brewery Malaysia Berhad. Meanwhile, over all a total of 285, efficient responses were collected which were used in the study and tested it for conclusion.

General industry characteristics of the respondents are shown in Table 1. As can be seen, the sample is drawn from a representative range of 11 Malaysian industries.

#### 3.2.1. Outcome and Explanatory factors of the study

Among the several dimensions of Green Supply Chain Management Practices major focus is on EF, IR and ECO dimensions. Besides, in this study GSCM practices, industrial expert opinion and pilot tests and other relevant literature based on careful review. In this study Likert scale is used to measure a survey questionnaire.

#### 3.2.2. Control variables

GSCM practice determinants based on three factors which are (ER, INV, ECO) based on literature these three factors include different regulatory, market and their suppliers pressure [23], [24], [30], [47], [59], [60], [67], [68] in studies five point Likert scale was used.

#### 3.2.3. Other control variables

In study studies, researcher mentioned some control factors for the support of the model of study that relate the determinants of firm's level management support to GSCM useful practices. Industry level controls for GSCM practices gathered by taking the basic mean level of each relevant factors using by industry. In GSCM practices, these are basic controls for firm's activities which are strongly supportive to structure of the industry. In the same industry of GSCM practices the institutional theory, derived the mimetic isomorphism that is about the best practices that enhance the legitimacy by using GSCM practices. For GSCM practices and implementation of ISO 14001 the most influencing

factor based on the literature was identified as cost pressure for organization [1], [19], [27]. The other controls, market pressure and regulatory discussed in previous studies have significant influences on firm's environmental management in many of countries [55],[58],[64],[65]. For the supporting, cleaner production and encouragement of ISO 14001 certification, Malaysian governments developed very stricter regulations for environmental management [12]. Firms environmental activities are also affected from stake holder pressures such as suppliers and customers [3]. In different studies, previous researcher has stated the characteristics and importance of customer pressures on firm's environmental conduct [25]. They also stated that in Malaysia leading firms regulated by their self, because in Malaysia.

Table 1: Distribution of Survey Respondents Enterprises by Industry

Industry	Total	Percentage
Automobile	48	16.84
Electrical and electronic	16	5.61
Chemical	32	11.22
Food	8	2.80
Iron and Steel	9	3.15
Paper	15	5.26
Power Generating	60	21.05
Other	20	7.01
Manufacturing	36	12.63
Textile	9	3.15
None Specified	32	11.22
Total	285	100

At last, in this study organizational size controls environmental issues based on their financial issues. Different studies have different views about organizational size but it may explain differing practices between smaller enterprises and the larger enterprises. one empirical analysis that firm size has very small positive influences on eco-sustainability orientation [42]. Based on following range organizational size is operational zed by employment level for this study, ranges are >8000, 3000-8000,1000-3000,500-100,100-500 and <100 employees.

### 3.3. Factor validation

In this study, before introducing model and testing hypothesis, we determine the most validated measurement properties of measuring construct for this study. In this study, our suitable choice is conformity factor analysis with the structural modelling approach as developed through AMOS tool facility in SPSS for measuring appropriate measurement properties based on previous studies. In this study the major independent variable of study is (management support, organizational

learning) and the dependent variables are and also control variable for this studies are (cost pressure, supplier pressure, market pressure, and the country regulations). CFA treats separately from regression model to each three set of construct. CFA analysis, all the measurement implied to correlate other factor for corresponding factors in CFA.

### 3.4. Model specification:

In this study, ordinary least square estimation model employing standard hierarchical multiple regression for testing the hypotheses. The estimation model mentioned below and for GSCM practices for ER, IR, ECO.

## 4. Results and discussion:

### 4.1 Result

In this study, hierarchical regression model presented in four steps, in the very first step, the control variables are regressed with only GSCM practice, in second step, management support and organization learning as independent variable mentioned, in the third step, the model presented for management support and in the last fourth step, model presented for organization learning. These above were four steps to present this study hierarchical regression model.

### 4.2. Discussion and implications:

In particularly Malaysia presented best formation of those strategies which are green to study. Majority of recent studies shown that worlds manufacturing will be completed in Asia in coming decades. Through cleaner production and EMS Malaysian organizations working to improve their environmental image, one percent contribution of GDP in 1999 from investment in environmental protection and it is growing [18]. These years' current focus in Malaysia is to develop integrated approaches and systematic management system for environment [54],[57],[61],[62],[63],[66]. Adoption rate of GSCM practices and development is still lacking as more developed countries [38]. In Malaysia, GSCM is new way of thinking about environmental management which focuses to supply chains from single plant improvement.

In this study, firms can control such variables are internal management support and organization learning program else of external variables affecting which are as regulatory, industry and other pressure. Malaysia has to self-regulate for the sack of environmental performance in the rivals of international partners. From previous results on developing management approaches Malaysian manufacturing organization can learn by adopting GSCM and environmental management approaches. Government policies and Malaysian proactive management policies and other important

factors are creating pressure for Malaysian firms to use these valuable practices. This study comes with the findings that organizational learning is strongly related to GSCM practices and these practices show continues improvements. Government can highlight on policies for Malaysian organization to encourage these practices. Involvements of Government to help Malaysian firms for obtaining ISO 9001 and 14001 that may lead to dramatic growth and success from GSCM practices. This study provides some important evidences on the regulators pressures, supplier's pressure, in the perspective of GSCM practices in Malaysian market. In Intuition theory perspectives there is a positive significant impact of industry level of environmental practice so these model can be used for future research [4] for identifying determinants on environmental behavior in emerging market. Environmental requirement is also a challenge to meet the requirement, for Malaysian firms is difficult to adopt GSCM practices in their operations, logistics activities, if the environmental requirement are difficult to adopt. Through meaningful implementation of Green Supply Chain Management Practices required supporting coordination with Suppliers and customers in the supply chain. Logistics partners must ensure about manufactured products, designs, and packaged to meet the objective of environmental management in the supply chain. Infrastructural resources are used to handle the flow of product and information resources to make decision among parties involved in logistics activities. Cooperation is much needed among logistics partners to implement Green Supply Chain Management Practices practice and to get desired goals for environmental change. In management agenda different objective and priorities have logistics partners for implementing GSCM practices the main challenges as well.

## 5. Conclusion

Over all Businesses are ever changing competition environment, organization are always required to make modification internally and externally to compete globally successfully into marketplace. Supply chain management is key sources for firms to gaining superior performance. Our finding from this study indicated the association between variables, and these association of variables helps to investigate future opportunity. Future aspects might more border in sampling and longitudinal analysis would more efficient prove for this management agenda. In this study, researcher mentioned some control for the support of the model of study that relate the determinants of firm's level support for the Green Supply Chain Management Practices useful practices. Industry level controls for GSCM practices gathered by taking the basic mean level of each relevant factors

using by industry finally this study find the relationship of pressure and their roles in outcome of GSCM practices, and more noticing as moderating factor is an open ended question for future research.

## REFERENCES

- [1] Atmadja, A., & Saputra, K. The influence of village conflict, village apparatus ability, village facilitator competency and commitment of local government on the success of budget management. *Academy of Accounting and Financial Studies Journal*, 22(1), 2018.
- [2] Bachrach, D. G., Mullins, R. R., & Rapp, A. A. Intangible sales team resources: Investing in team social capital and transactive memory for market-driven behaviors, norms and performance. *Industrial Marketing Management*, 62, 88-99, 2017.
- [3] Barnett, M. L., Henriques, I., & Husted Corregan, B. Governing the Void between Stakeholder Management and Sustainability., 2018.
- [4] Bocken, N. M., Short, S. W., Rana, P., & Evans, S. A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42-56, 2014.
- [5] Camisón, C., & Villar-López, A. Organizational innovation as an enabler of technological innovation capabilities and firm performance. *Journal of business research*, 67(1), 2891-2902, 2014.
- [6] Chan, R. Y., & Ma, K. H. Environmental orientation of exporting SMEs from an emerging economy: its antecedents and consequences. *Management international review*, 56(5), 597-632, 2016.
- [7] Chen, C.-C. Incorporating green purchasing into the frame of ISO 14000. *Journal of Cleaner Production*, 13(9), 927-933, 2005.
- [8] Christopher, M. *Logistics & supply chain management*: Pearson UK, 2016.
- [9] Crook, T. R., & Combs, J. G. Sources and consequences of bargaining power in supply chains. *Journal of Operations Management*, 25(2), 546-555, 2007.
- [10] Fragouli, E & Yankson, J.K. The Role of Strategic Planning on the Management of Organizational Change. *Financial Risk and Management Reviews*, 1(2): 68-87, 2015. DOI: 10.18488/journal.89/2015.1.2/89.2.68.87.
- [11] Epstein, M. J., & Buhovac, A. R. *Making sustainability work: Best practices in managing and measuring corporate social, environmental, and economic impacts*: Berrett-Koehler Publishers, 2014.
- [12] Fernando, Y., & Hor, W. L. Impacts of energy management practices on energy efficiency and carbon emissions reduction: A survey of Malaysian manufacturing firms. *Resources, Conservation and Recycling*, 126, 62-73, 2017.
- [13] Fraj, E., Matute, J., & Melero, I. Environmental strategies and organizational competitiveness in the hotel industry: The role of learning and innovation as determinants of environmental success. *Tourism management*, 46, 30-42, 2015.
- [14] Fukuyama, F. *State building: Governance and world order in the 21st century*: Profile Books, 2017.
- [15] Galbraith, J. K. *The new industrial state*: Princeton University Press, 2015.
- [16] Gaur, J., Subramoniam, R., Govindan, K., & Huisinigh, D. Closed-loop supply chain management: From conceptual to an action oriented framework on core acquisition. *Journal of Cleaner Production*, 167, 1415-1424, 2017.
- [17] Ghazilla, R. A. R., Sakundarini, N., Abdul-Rashid, S. H., Ayub, N. S., Olugu, E. U., & Musa, S. N. Drivers and barriers analysis for green manufacturing practices in Malaysian SMEs: a preliminary findings. *Procedia CIRP*, 26, 658-663, 2015.
- [18] Ghisellini, P., Cialani, C., & Ulgiati, S. A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, 114, 11-32, 2016.
- [19] Govindan, K., Khodaverdi, R., & Vafadarnikjoo, A. Intuitionistic fuzzy based DEMATEL method for developing green practices and performances in a green supply chain. *Expert Systems with Applications*, 42(20), 7207-7220, 2015.
- [20] Guide Jr, V. D. R., & Van Wassenhove, L. N. OR FORUM—The evolution of closed-loop supply chain research. *Operations research*, 57(1), 10-18, 2009.
- [21] Haider, S. I. *Environmental Management System ISO 14001: 2004: Handbook of Transition with CD-ROM*: CRC Press, 2016.
- [22] Hanim Mohamad Zailani, S., Eltayeb, T. K., Hsu, C.-C., & Choon Tan, K. The impact of external institutional drivers and internal strategy on environmental performance. *International Journal of Operations & Production Management*, 32(6), 721-745, 2012.
- [23] Hassan, S., & Othman, Z. Determinants of employees provident fund in Malaysia: Potential factors to jeopardize the EPF sustainability. *Business and Economic Horizons*, 14(1), 29-42, 2018a.
- [24] Hassan, S., & Othman, Z. Forecasting on the long term sustainability of the employees provident fund in Malaysia via the Bix-Jenkins' ARIMA model. *Business and Economic Horizons*, 14(1), 43-53, 2018b.



- [25] Abidin, I. S. Z., & Haseeb, M. Malaysia-Gcc Bilateral Trade, Macroeconomic Indicators And Islamic Finance Linkages: A Gravity Model Approach. *Academy of Accounting and Financial Studies Journal*, 22, 1-7, 2018.
- [26] Hervani, A. A., Helms, M. M., & Sarkis, J. Performance measurement for green supply chain management. *Benchmarking: An international journal*, 12(4), 330-353, 2015.
- [27] Ismail, T. Islamic Work Ethics And Organizational Justice Implementation In Reaching Accountants' job Satisfaction. *Academy of Accounting and Financial Studies Journal*, 22(1), 2018.
- [28] Jacobs, F. R., Chase, R. B., & Lummus, R. R. *Operations and supply chain management*: McGraw-Hill/Irwin New York, NY, 2014.
- [29] Joshi, K., & Bhardwaj, N. Women and natural resource management: A study of 'communities of practice' prevailing in women farmers' community management of water and forests of lesser Himalayan region in India. *Int. J. Adv. Res.*, 3, 363-374, 2015.
- [30] Kerzner, H., & Kerzner, H. R. *Project management: a systems approach to planning, scheduling, and controlling*: John Wiley & Sons, 2017.
- [31] Kuei, C.-h., Madu, C. N., Chow, W. S., & Chen, Y. Determinants and associated performance improvement of green supply chain management in China. *Journal of Cleaner Production*, 95, 163-173, 2015.
- [32] Haseeb, M. Emerging Issues in Islamic Banking & Finance: Challenges and Solutions. *Academy of Accounting and Financial Studies Journal*, 22, 1-5, 2018.
- [33] Kuratko, D. F., Hornsby, J. S., & Covin, J. G. Diagnosing a firm's internal environment for corporate entrepreneurship. *Business Horizons*, 57(1), 37-47, 2014.
- [34] Luthra, S., Garg, D., & Haleem, A. An analysis of interactions among critical success factors to implement green supply chain management towards sustainability: An Indian perspective. *Resources Policy*, 46, 37-50, 2015.
- [35] Mangan, J., Lalwani, C., & Lalwani, C. L. *Global logistics and supply chain management*: John Wiley & Sons, 2016.
- [36] Mazzei, M. J., Flynn, C. B., & Haynie, J. J. Moving beyond initial success: Promoting innovation in small businesses through high-performance work practices. *Business Horizons*, 59(1), 51-60, 2016.
- [37] Melander, L. Achieving sustainable development by collaborating in green product innovation. *Business Strategy and the Environment*, 26(8), 1095-1109, 2017.
- [38] Mitra, S., & Datta, P. P. Adoption of green supply chain management practices and their impact on performance: an exploratory study of Indian manufacturing firms. *International Journal of Production Research*, 52(7), 2085-2107, 2014.
- [39] Othman, A. A., Kaliani Sundram, V. P., Mohamed Sayuti, N., & Shamsul Bahrin, A. The Relationship between Supply Chain Integration, Just-In-Time and Logistics Performance: A Supplier's Perspective on the Automotive Industry in Malaysia. *International journal of supply chain management*, 5(1), 44-51, 2016.
- [40] Pandian, G. R. S., & Abdul-Kader, W. Performance evaluation of reverse logistics enterprise—an agent-based simulation approach. *International Journal of Sustainable Engineering*, 10(6), 384-398, 2017.
- [41] Rashid, N. R. N. A. Awareness of eco-label in Malaysia's green marketing initiative. *International Journal of Business and Management*, 4(8), 132, 2009.
- [42] Roxas, B., Ashill, N., & Chadee, D. Effects of Entrepreneurial and Environmental Sustainability Orientations on Firm Performance: A Study of Small Businesses in the Philippines. *Journal of Small Business Management*, 55(S1), 163-178, 2017.
- [43] Haseeb, M., Hartani, N. H., Bakar, A., Azam, M., & Hassan, S. Exports, foreign direct investment and economic growth: Empirical evidence from Malaysia (1971-2013). *American Journal of Applied Sciences*, 11(6), 1010-1015, 2014.
- [44] Sharma, N. Innovation in Green Practices: A Tool for Environment Sustainability and Competitive Advantage, 2017.
- [45] Stark, J. Product lifecycle management *Product Lifecycle Management (Volume 1)* (pp. 1-29): Springer, 2015.
- [46] Tarman, B. Social studies education and a new social studies movement. *Journal of Social Studies Education Research*, 1(1), 1-16, 2010.
- [47] Tarman, B., & Chigisheva, O. Editorial for Special Issue: Transformation of Educational Policy, Theory and Practice in Post-Soviet Social Studies Education. *Journal of Social Studies Education Research*, 8(2), i-iv, 2017.
- [48] Teece, D. J. A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. *Journal of International Business Studies*, 45(1), 8-37, 2014.
- [49] Thayer, M. L. *Holistic Risk-Based Approach to Identify Significant Environmental Aspects within an Environmental Management System*. Oklahoma State University, 2017.
- [50] Vachon, S. Green supply chain practices and the selection of environmental technologies. *International Journal of Production Research*, 45(18-19), 4357-4379, 2007.
- [51] Vachon, S., & Klassen, R. D. Extending green practices across the supply chain: the impact of upstream and downstream integration.



- International Journal of Operations & Production Management*, 26(7), 795-821, 2006.
- [52] Ali, A. M., & Anis, J. A. R. B. O. U. I. Does Managerial Emotional Biases Affect Debt Maturity Preference? Bayesian Network Method: Evidence from Tunisia. *Financial Risk and Management Reviews*, 2(1), 1-25, 2016.
- [53] Walker, H., Di Sisto, L., & McBain, D. Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sectors. *Journal of purchasing and supply management*, 14(1), 69-85, 2008.
- [54] Yeoh, B. G., Idrus, A. Z., & Ong, K. Technology research and development for environmental management-with specific reference to Malaysia. *ASEAN Journal on Science and Technology for Development*, 5(1), 1-13, 2017.
- [55] Zhu, Q., Sarkis, J., Cordeiro, J. J., & Lai, K.-H. Firm-level correlates of emergent green supply chain management practices in the Chinese context. *Omega*, 36(4), 577-591, 2008.
- [56] Kuznetsova, Svitlana, and Maria Vakulich. Investment Climate Rating Evaluation: The Case of Ukrainian Economy. *Financial Risk and Management Reviews* 3(1): 1-12, 2017.
- [57] Heras-Saizarbitoria, I., Arana, G., & Boiral, O. Outcomes of environmental management systems: The role of motivations and firms' characteristics. *Business Strategy and the Environment*, 25(8), 545-559, 2016.
- [58] Kumar, R., & Chandrakar, R. Overview of green supply chain management: operation and environmental impact at different stages of the supply chain. *International Journal of Engineering and Advanced Technology*, 1(3), 1-6, 2012.
- [59] Sarkis, J. A boundaries and flows perspective of green supply chain management. *Supply chain management: an international journal*, 17(2), 202-216, 2012.
- [60] Haseeb, M., Hassan, S., & Azam, M. Rural-urban transformation, energy consumption, economic growth, and CO2 emissions using STRIPAT model for BRICS countries. *Environmental Progress & Sustainable Energy*, 36(2), 523-531, 2017.
- [61] Nwizu, S. C. Application of Value Chain Analysis in the Sustainable Management of Tertiary Distance Education Programmes in Nigeria. *International Journal of Management and Sustainability*, 4(5), 104-113, 2015.
- [62] Kessey, K. D., & Ampaabeng, I. Management in Public Utility Companies in Ghana: An Appraisal of Ghana Water Company Limited. *International Journal of Management and Sustainability*, 3(8), 500-516, 2014.
- [63] Negrut, V. Overview of the Most Common Types of Maladministration Raised at EU Level. *International Journal of Public Policy and Administration Research*, 4(2), 35-40, 2017.
- [64] Callaway, S. K. How the Principles of the Sharing Economy Can Improve Organizational Performance of the US Public School System. *International Journal of Public Policy and Administration Research*, 4(1), 1-11, 2017.
- [65] Swenson, C. Empirical Evidence on Municipal Tax Policy and Firm Growth. *International Journal of Public Policy and Administration Research*, 3(1), 1-13, 2016.
- [66] Edriss, A. K., & Chiunda, C. Interfaces Between Road Infrastructure and Poverty in Africa: The Case of Malawi, 1994-2013. *Journal of Social Economics Research*, 4(1), 9-21, 2017.
- [67] Samiha, B., & Abdessalem, M. Various International Experiences in Waste Management-Useful Lessons for Algeria. *International Journal of Business, Economics and Management*, 2(11), 222-240, 2015.
- [68] Udoka, C. O., & Orok, A. B. Assessment of the Enterprise Risk Management (ERM) in the Nigerian Banking Industry. *Asian Journal of Economics and Empirical Research*, 4(2), 68-74, 2017.
- [69] Mayan, S. N. A., & Nor, R. M. Prospects and Challenges of Ecotourism Sector and Poverty Eradication in Sabah: The Case of Orangutans and Mabul Island. *Global Journal of Social Sciences Studies*, 3(1), 1-12, 2017.
- [70] Bhavan, T. Human Capital as a Pushing Factor of Export: The Case of Four South Asian Economies. *Asian Development Policy Review*, 5(4), 299-306, 2017.
- [71] Jones Osasuyi, O., & Mwakipsile, G. Working Capital Management and Managerial Performance in some Selected Manufacturing Firms in Edo State Nigeria. *Journal of Accounting, Business and Finance Research*, 1(1), 46-55, 2017.
- [72] Abubakar, I. A., & Ishak, R. B. The Effect of Board Attributes on Real Earnings Management in Nigerian Financial Institutions. *Journal of Accounting, Business and Finance Research*, 1(1), 76-83, 2017.
- [73] Eketu, C. A. (2018). Perspectives on Human Nature and Implications for Research in the Behavioural Sciences. *International Journal of Emerging Trends in Social Sciences*, 4(1), 42-46.
- [74] Muthuselvi, L., & Ramganes, E. (2017). Use of e-Governance by Administrators of Higher Learning Institutions. *International Journal of Emerging Trends in Social Sciences*, 1(2), 68-73.